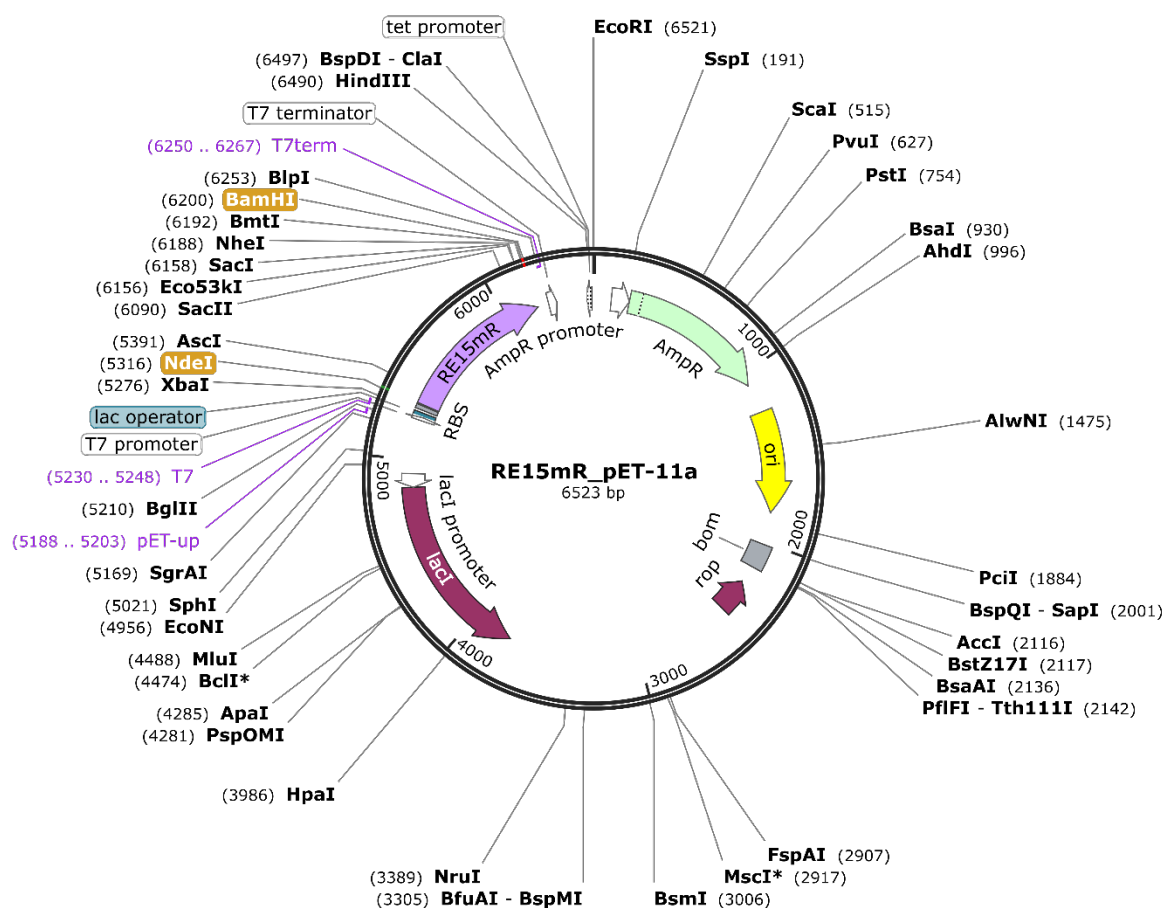


## SUPPLEMENTARY MATERIAL

**Fig. S1: Map of the expression vector RE15mR\_pET-11a containing a gene coding hybrid protein RE15mR.**

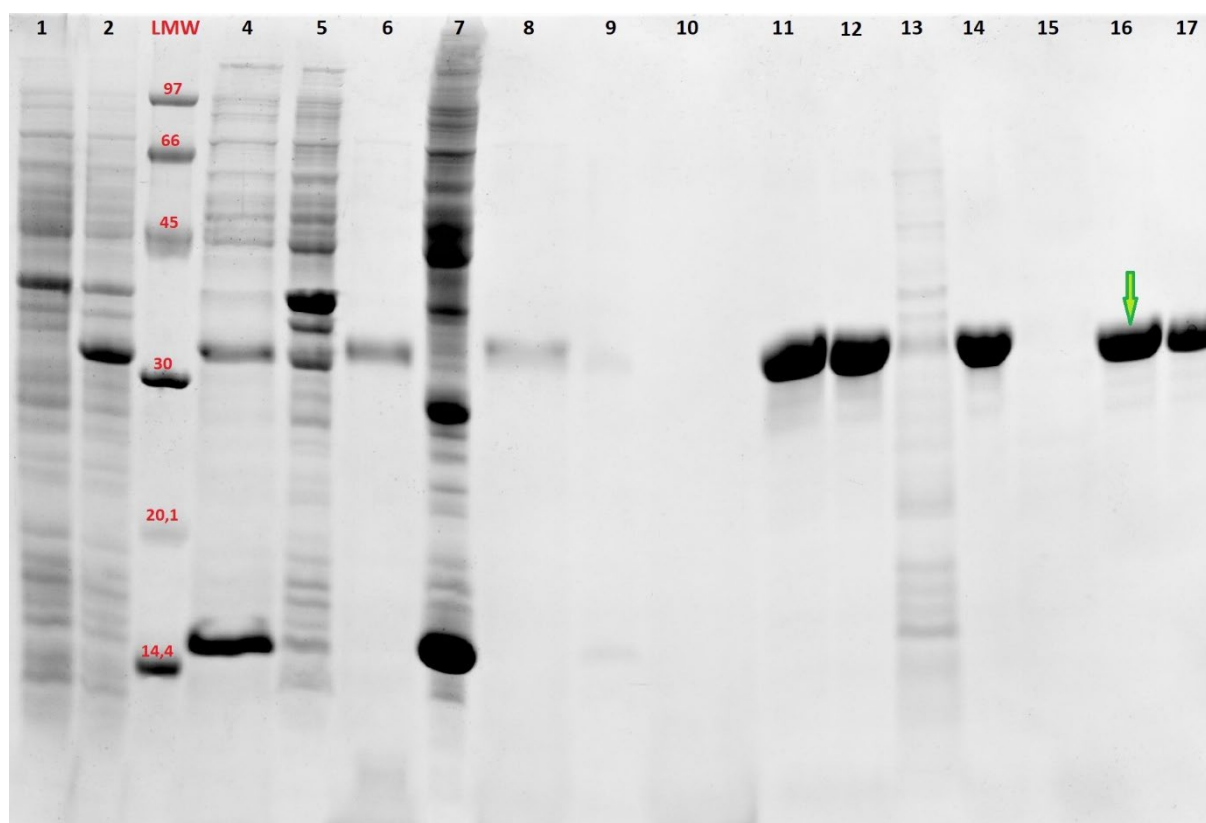


**Fig. S2: Amino acid sequence of the recombinant hybrid protein RE15mR.**

MGGRPSDSYGAPGGGNGGRPSDSYGAPGGGNGGRPSDSYGAPGGGNGGKGGKGGK  
 GGGGRPSDSYGAPGGGNGGRPSDSYGAPGGGNGGRPSDSYGAPGGGNGPQGIWGQ  
 GVPGAGVPGAGVPGAGKVPGIGVPGIGVPGIGVPGIGKVPGAGVPGAGVPGAGKVPG  
 IGVPGIGVPGIGVPGIGKVPGAGVPGAGVPGAGGPQGIWGQGAVTGRGDSPASSAVTG

RGDSPASSAVTGRGDSPASSAVTGRGDSPASSAVTGRGDSPASSAVTGRGDSPASSAVT  
GRGDSPASS

**Fig. S3: Electrophoretic separation's example of samples taken during the RE15mR purification process (SDS-page, 15% polyacrylamide gel)**



- 1 - bacterial culture (BLR (DE3) / RE15mR) medium before induction
- 2 - bacterial culture medium 4 hours after IPTG induction
- 3 - protein molecular weight marker LMW
- 4 - supernatant after bacterial cell sonication and centrifugation
- 5 - protein precipitate from bacterial cells after sonication and centrifugation
- 6 - supernatant after proteins denaturation at 90 °C and centrifugation
- 7 - precipitate after proteins denaturation at 90 °C and centrifugation
- 8 - sample supernatant from ammonium sulphate desalting to 20% after centrifugation
- 9 - sample precipitate from ammonium sulphate desalting to 20% after centrifugation
- 10 - sample supernatant from ammonium sulphate desalting 20-40% after centrifugation

- 11 - sample precipitate from ammonium sulphate desalting 20-40% after centrifugation
- 12 - sample supernatant after dialysis into 20mM Tris buffer and centrifugation
- 13 - sample supernatant after dialysis into 20mM Tris buffer and centrifugation
- 14 - Macro-Prep High Q column purification - unbound proteins
- 15 - 0.5M salt solution from Macro-Prep High Q resin washing
- 16 - Final protein, after dialysis to water, filtered (20 µl)
- 17 - Final protein, after dialysis to water, filtered (10 ul)